

Second Regular Session  
Seventy-first General Assembly  
STATE OF COLORADO

INTRODUCED

LLS NO. 18-0326.01 Nicole Myers x4326

SENATE BILL 18-086

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SENATE SPONSORSHIP

Lambert and Williams A.,

HOUSE SPONSORSHIP

Ginal and Rankin,

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Senate Committees

Business, Labor, & Technology

House Committees

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A BILL FOR AN ACT

101 CONCERNING THE USE OF CYBER CODING CRYPTOLOGY FOR STATE  
102 RECORDS.

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Bill Summary

*(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://leg.colorado.gov>.)*

The chief information security officer in the governor's office of information technology (OIT), the director of OIT, the department of state, and the executive director of the department of regulatory agencies are required to take certain actions to protect state records containing trusted sensitive and confidential information from criminal, unauthorized, or inadvertent manipulation or theft.

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.  
Capital letters or bold & italic numbers indicate new material to be added to existing statute.  
Dashes through the words indicate deletions from existing statute.

The chief information security officer is required to:

- ! Identify, assess, and mitigate cyber threats to state government;
- ! Annually collect information from all public agencies to assess the nature of threats to data systems and the potential risks and civil liabilities from the theft or inadvertent release of such information;
- ! In coordination and partnership with specified agencies, boards, and councils, annually assess the data systems of each public agency for the benefits and costs of adopting and applying distributed ledger technologies such as blockchains;
- ! Develop and maintain a series of metrics to identify, assess, and monitor each public agency data system for its platform descriptions, vulnerabilities, risks, liabilities, appropriate employee access control, and the benefits and costs of adopting encryption and distributed ledger technologies.

The director of OIT is required to consider the annual metrics from the office of the chief information security officer to recommend programs, contracts, and upgrades of data systems that have good cost-benefit potential or return on investment. In addition, OIT and the office of the chief information security officer are required to consider developing public-private partnerships and contracts to allow capitalization of encryption technologies while protecting intellectual property rights.

The department of state is required to consider research, development, and implementation for encryption and data integrity techniques, including distributed ledger technologies such as blockchains. The department of state is required to consider using distributed ledger technologies when accepting business licensing records and when distributing department of state data to other departments and agencies.

The executive director of the department of regulatory agencies or the director's designee is required to consider secure encryption methods, including distributed ledger technologies, to protect against falsification, create visibility to identify external hacking threats, and to improve internal data security.

In addition, the bill specifies that institutions of higher education may include distributed ledger technologies within their curricula and research and development activities.

The bill also specifies that the university of Colorado at Colorado Springs and any nonprofit organization with which the university has a partnership may consider:

- ! Encouraging coordination with the United States department of commerce and the national institute of

standards and technologies to develop the capability to act as a Colorado in-state center of excellence on cybersecurity advice and national institute of standards and technologies standards;

- ! Studying efforts to protect privacy of personal identifying information maintained within distributed ledger programs, ensuring that programs make all attempts to follow best practices for privacy, and providing advice to all program stakeholders on the requirement to maintain privacy in accordance with required regulatory bodies and governing standards; and
- ! Encouraging the use of distributed ledger technologies, such as blockchains, within their proposed curricula for public sector education.

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1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, **add** 24-37.5-407 as  
3 follows:

4 **24-37.5-407. Cyber coding cryptology for the transmission and**  
5 **storage of state records - legislative declaration - intent.** (1) (a) THE

6 GENERAL ASSEMBLY HEREBY FINDS, DETERMINES, AND DECLARES THAT:

7 (I) AN IMPORTANT FUNCTION OF STATE GOVERNMENT IS TO  
8 PROTECT STATE RECORDS CONTAINING TRUSTED INFORMATION ABOUT  
9 INDIVIDUALS, ORGANIZATIONS, ASSETS, AND ACTIVITIES FROM CRIMINAL,  
10 UNAUTHORIZED, OR INADVERTENT MANIPULATION OR THEFT;

11 (II) IN 2017, THE CYBER THREAT TO THE COLORADO GOVERNMENT  
12 INCLUDED SIX TO EIGHT MILLION ATTEMPTED ATTACKS PER DAY;

13 (III) UNSECURED PUBLIC RECORDS ARE VALUABLE TARGETS FOR  
14 IDENTITY THIEVES AND HACKERS WITH THE INTENT TO STEAL OR  
15 PENETRATE CORPORATE RECORDS. IN ADDITION, THERE ARE INCREASING  
16 THREATS TO THE THEFT OF PERSONAL PRIVACY INFORMATION WITHIN  
17 GOVERNMENT DATA AND A GROWING NUMBER OF TREATS TO NETWORKS,

1 CRITICAL INFRASTRUCTURE, AND PRIVATE DATA AND DEVICES.

2 (IV) IT IS CRUCIAL TO DESIGN A FRAMEWORK TO IDENTIFY  
3 SOLUTIONS TO PREVENT UNAUTHORIZED EXTERNAL DISCLOSURES,  
4 PROTECT PRIVACY AND CONFIDENTIALITY, AND PREVENT INADVERTENT  
5 RELEASES OF INFORMATION;

6 (V) THE EXPANDED USE OF DISTRIBUTED LEDGER TECHNOLOGIES,  
7 SUCH AS BLOCKCHAINS, MAY OFFER TRANSFORMATIVE IMPROVEMENTS TO  
8 DATA SECURITY, ACCOUNTABILITY, TRANSPARENCY, AND SAFETY ACROSS  
9 DISPERSED STATE DEPARTMENTS AND JURISDICTIONS;

10 (VI) LOCAL, REGIONAL, AND NATIONAL AGENCIES ARE CHARGED  
11 WITH MAINTAINING RECORDS THAT INCLUDE BIRTH AND DEATH DATES,  
12 INFORMATION ABOUT MARITAL STATUS, BUSINESS LICENSING, PROPERTY  
13 TRANSFERS, OR CRIMINAL ACTIVITY. MANAGING AND USING THESE DATA  
14 CAN BE COMPLICATED, EVEN FOR ADVANCED GOVERNMENTS. SOME  
15 RECORDS EXIST ONLY IN PAPER FORM, AND IF CHANGES NEED TO BE MADE  
16 IN OFFICIAL REGISTRIES, CITIZENS OFTEN MUST APPEAR IN PERSON TO DO  
17 SO. INDIVIDUAL AGENCIES TEND TO BUILD THEIR OWN ISOLATED  
18 REPOSITORIES OF DATA AND INFORMATION-MANAGEMENT PROTOCOLS,  
19 WHICH PRECLUDE OTHER PARTS OF THE GOVERNMENT FROM USING THEM.

20 (VII) BLOCKCHAIN TECHNOLOGY IS RAPIDLY EVOLVING FOR EVERY  
21 SECTOR OF THE MARKETPLACE AS IT OFFERS UNIQUE SOLUTIONS TO  
22 SUPPORT CONNECTION OF SOCIETY, TECHNOLOGY, AND FINANCES BY  
23 SUPPORTING THE MAPPING OF HUMAN ACTION TO TRANSACTIONS  
24 PERFORMED ON THE INTERNET;

25 (VIII) BLOCKCHAIN DISTRIBUTED LEDGERS PROVIDE THE  
26 CAPABILITY OF OPENLY TRACEABLE TRANSACTIONS WHILE MAINTAINING  
27 THE PRIVACY OF EACH PERSON PERFORMING THE TRANSACTIONS;

1 (IX) GOVERNMENT PROGRAMS USING BLOCKCHAIN TECHNOLOGIES  
2 CAN OFFER THE ABILITY TO CONTROL FUNCTIONALITY, TRACK  
3 TRANSACTIONS, VERIFY IDENTITIES, SUPPORT UNIFORMITY, RESIST  
4 TAMPERING, ENABLE LOGISTICAL CONTROL FOR LARGE NUMBERS OF  
5 PARTICIPANTS, PROTECT PRIVACY, AND SUPPORT ACCOUNTABILITY AND  
6 AUDITING;

7 (X) BLOCKCHAIN TECHNOLOGIES CAN PROVIDE OR INCREASE THE  
8 FOLLOWING BENEFITS:

9 (A) ENABLE THE STATE TO REDUCE FRAUD AND MALICIOUS  
10 INFILTRATION OF STATE-CONTROLLED PROGRAMS BY CREATING AN  
11 AUDITABLE VISIBILITY FOR ALL TRANSACTIONS AND THE PEOPLE WHO  
12 PERFORM THEM;

13 (B) REDUCE FALSE COMMUNICATIONS FROM COMPUTING DEVICES,  
14 WHICH CAN PROVIDE DATA TO PURSUE APPROPRIATE ENFORCEMENT  
15 ACTIONS. DATA WITH PROOF OF ORIGIN WOULD BE ABLE TO BE USED TO  
16 TRACK FORENSIC CHAIN OF CUSTODY FOR USE IN COURTS OF LAW.

17 (C) SUPPORT VERIFICATION OF AUTHORIZED USERS,  
18 ORGANIZATIONS, DISTRIBUTED COMPUTING DEVICES, AND  
19 NONREPUDIATION OF THE ACTIONS OF PARTIES PARTICIPATING IN VIRTUAL  
20 TRANSACTIONS;

21 (D) REDUCE SPOOFING OF DEVICES, FALSIFICATION OF DATA  
22 RECEIVED FROM REGULATED OR CONTROL DEVICES, AND DRASTICALLY  
23 REDUCE OR ELIMINATE THE THREAT OF MALWARE INSTALLED ON DEVICES  
24 USED STATEWIDE;

25 (E) BETTER PROTECT PERSONAL PRIVACY INFORMATION;

26 (F) CREATE GLOBAL VISIBILITY WHILE MAINTAINING THE  
27 CONFIDENTIALITY AND PRIVACY OF INDIVIDUAL ORGANIZATIONS AND

1       USERS;

2               (G) REDUCE STATE GOVERNMENT EXPENDITURES AND COSTS AS  
3       A RESULT OF THE VISIBILITY OF TRANSACTIONS GAINED FROM THE OPEN  
4       NATURE OF BLOCKCHAIN-ENABLED PROGRAMS;

5               (H) THE ABILITY TO ADOPT BLOCKCHAIN-ENABLED PLATFORMS  
6       FOR COMPUTER-CONTROLLED PROGRAMS, DATA TRANSFER AND STORAGE,  
7       OR REGULATION PROGRAMS THAT WOULD BE NEEDED OR USED BY THE  
8       STATE. THESE WOULD ALSO ENABLE TRANSACTION-BASED REVENUE  
9       GENERATION AND RETURN ON INVESTMENT FOR STATE PROGRAMS.

10              (I) PROVIDE QUANTIFIABLE RISK AND QUALITY RATING CAPABILITY  
11       FOR ALL ORGANIZATIONS, AGENCIES, AND INSURANCE PROVIDERS, GIVING  
12       THE ABILITY TO SET PREMIUMS AND REWARD OR ENFORCE PUNITIVE  
13       CONTROLS ON ORGANIZATIONS BASED ON THEIR QUALITY PERFORMANCE  
14       OVER TIME. POSITIVE ACTION TO MITIGATE RISK SHOULD LOWER STATE  
15       CIVIL LIABILITIES, LOWER INSURANCE COSTS, AND LOWER STATE  
16       VULNERABILITY TO ADVERSE LITIGATION.

17              (J) WHEN AUTHORIZED, PROVIDE A REVENUE GENERATION STREAM  
18       FOR THE STATE BY THE SALE OF TRANSACTIONS, FEES, AND MEMBERSHIPS  
19       TO PRIVATE ORGANIZATIONS FOR USE OF OPERATIONAL BLOCKCHAIN  
20       PLATFORMS. A BLOCKCHAIN-ENABLED PLATFORM MAY ALLOW THE SALE  
21       OF TRUSTED COMPONENTS AND CONTINUED TRANSACTION-BASED  
22       RETURNS ON INVESTMENT ON AN ONGOING BASIS.

23              (K) ENFORCE COLORADO GOVERNANCE REQUIREMENTS AND  
24       LAWS, THEREBY PROTECTING LEGAL AND LEGITIMATE DISTRIBUTION OF  
25       CONTROLLED SUBSTANCES TO PROTECT STATE REVENUE STREAMS  
26       RECEIVED BY TAXATION OF CONTROLLED SUBSTANCES.

27              (b) THE GENERAL ASSEMBLY FURTHER FINDS, DETERMINES, AND

1       DECLARES THAT THE INTENT OF THIS SECTION IS TO ALLOW AND  
2       ENCOURAGE THE OFFICE OF INFORMATION TECHNOLOGY, THE OFFICE OF  
3       THE CHIEF INFORMATION SECURITY OFFICER, DEPARTMENTS, AND  
4       AGENCIES TO IDENTIFY AND IMPLEMENT DISTRIBUTED LEDGER  
5       TECHNOLOGIES, SUCH AS BLOCKCHAINS, WHENEVER APPROPRIATE,  
6       RATHER THAN TO MANDATE SPECIFIC SOLUTIONS. IN ADDITION, THE  
7       INTENT OF THIS SECTION IS TO ENCOURAGE THE OFFICE OF THE CHIEF  
8       INFORMATION SECURITY OFFICER TO COORDINATE CROSS-JURISDICTIONAL  
9       STANDARDS AND PROCEDURES, ESPECIALLY AMONG STATE DEPARTMENTS  
10      AND AGENCIES AND AMONG COUNTIES AND MUNICIPALITIES WHEN  
11      APPROPRIATE.

12           (2) THE OFFICE OF THE CHIEF INFORMATION SECURITY OFFICER  
13      SHALL IDENTIFY, ASSESS, AND MITIGATE CYBER THREATS TO STATE  
14      GOVERNMENT. IN FURTHERANCE OF THIS RESPONSIBILITY, THE CHIEF  
15      INFORMATION SECURITY OFFICER SHALL, ON AN ANNUAL BASIS AND  
16      THROUGH ANNUAL PUBLIC AGENCY ENTERPRISE CYBERSECURITY PLANS,  
17      COLLECT INFORMATION FROM ALL PUBLIC AGENCIES AS DEFINED IN  
18      SECTION 24-37.5-402 (9) TO ASSESS THE NATURE OF THREATS TO DATA  
19      SYSTEMS AND THE POTENTIAL RISKS AND CIVIL LIABILITIES FROM THE  
20      THEFT OR INADVERTENT RELEASE OF SUCH INFORMATION. INSTITUTIONS  
21      OF HIGHER EDUCATION AND THE GENERAL ASSEMBLY MAY PROVIDE THE  
22      INFORMATION SPECIFIED IN THIS SUBSECTION (2) TO THE CHIEF  
23      INFORMATION SECURITY OFFICER.

24           (3) IN COORDINATION WITH THE COLORADO CYBERSECURITY  
25      COUNCIL CREATED IN SECTION 24-33.5-1902, AND IN PARTNERSHIP WITH  
26      THE OFFICE AND THE GOVERNMENT DATA ADVISORY BOARD CREATED IN  
27      SECTION 24-37.5-703, THE OFFICE OF THE CHIEF INFORMATION SECURITY

1 OFFICER IS ENCOURAGED TO ASSESS THE DATA SYSTEMS OF EACH PUBLIC  
2 AGENCY FOR THE BENEFITS AND COSTS OF ADOPTING AND APPLYING  
3 DISTRIBUTED LEDGER TECHNOLOGIES SUCH AS BLOCKCHAINS. THE OFFICE  
4 OF THE CHIEF INFORMATION SECURITY OFFICER IS ENCOURAGED TO  
5 CONSIDER PROGRAM LOSSES DUE TO POTENTIAL MALICIOUS ATTACK,  
6 TRANSACTIONAL ERRORS, OR FRAUD AS POSSIBLE SAVINGS ACHIEVABLE  
7 FROM VISIBILITY GAINED THROUGH DISTRIBUTED LEDGER PLATFORMS. THE  
8 OFFICE OF THE CHIEF INFORMATION SECURITY OFFICER IS ENCOURAGED TO  
9 DEVELOP AND MAINTAIN A SERIES OF METRICS TO IDENTIFY, ASSESS, AND  
10 MONITOR EACH PUBLIC AGENCY DATA SYSTEM ON AN ONGOING BASIS FOR  
11 THEIR PLATFORM DESCRIPTIONS, VULNERABILITIES, RISKS, LIABILITIES,  
12 APPROPRIATE EMPLOYEE ACCESS CONTROL, AND THE BENEFITS AND COSTS  
13 OF ADOPTING ENCRYPTION AND DISTRIBUTED LEDGER TECHNOLOGIES. THE  
14 OFFICE OF THE CHIEF INFORMATION SECURITY OFFICER IS ALSO  
15 ENCOURAGED TO CONSIDER THE COST-AVOIDANCE BENEFITS AND THE  
16 POSITIVE BENEFITS OF REDUCING LITIGATION RISKS OR THE COSTS OF  
17 STATE INSURANCE AGAINST STATE LEGAL LIABILITIES.

18 (4) THE OFFICE AND THE OFFICE OF THE CHIEF INFORMATION  
19 SECURITY OFFICER SHALL CONSIDER DEVELOPING PUBLIC-PRIVATE  
20 PARTNERSHIPS AND CONTRACTS TO ALLOW CAPITALIZATION OF  
21 ENCRYPTION TECHNOLOGIES, WHILE PROTECTING INTELLECTUAL  
22 PROPERTY RIGHTS.

23 (5) IN COMMUNICATION BETWEEN MULTIPLE PARTIES, THE OFFICE  
24 AND THE OFFICE OF THE CHIEF INFORMATION SECURITY OFFICER ARE  
25 ENCOURAGED TO ENSURE THAT PLATFORMS INCORPORATE THE  
26 NONREPUDIATION OF PARTICIPATING ENTITIES IN VIRTUAL TRANSACTIONS.  
27 DUE TO THE INHERENT LACK OF POSITIVE IDENTIFICATION BETWEEN



1 PARTIES COMMUNICATING OVER THE INTERNET, SECURE COMMUNICATION  
2 SYSTEMS SHOULD BE DESIGNED TO ASSURE THAT EACH SENDER OF DATA  
3 IS PROVIDED WITH PROOF OF DELIVERY AND THAT THE RECIPIENT OF DATA  
4 IS PROVIDED WITH PROOF OF THE SENDER'S IDENTITY TO ENSURE THAT THE  
5 INTEGRITY OF THE COMMUNICATIONS CAN BE TRUSTED, THAT EACH  
6 COMMUNICATION IS ACCOUNTABLE AND AUDITABLE, AND THE  
7 COMMUNICATORS CANNOT DENY THAT THEIR COMMUNICATIONS TOOK  
8 PLACE. THIS IS TECHNICALLY CALLED NONREPUDIATION, IN COMPLIANCE  
9 WITH FEDERAL GUIDELINES AND INDUSTRY BEST PRACTICES.

10 **SECTION 2.** In Colorado Revised Statutes, **add** 24-21-117 as  
11 follows:

12 **24-21-117. Encryption and data integrity techniques -**  
13 **research and development.** IN CONJUNCTION WITH THE EFFORTS OF THE  
14 OFFICE OF INFORMATION TECHNOLOGY REGARDING CYBER CODING  
15 CRYPTOLOGY FOR STATE RECORDS PURSUANT TO SECTION 24-37.5-407,  
16 THE DEPARTMENT OF STATE, IN CONJUNCTION WITH UPGRADES TO THE  
17 DEPARTMENT OF STATE'S BUSINESS SUITE, SHALL CONSIDER RESEARCH,  
18 DEVELOPMENT, AND IMPLEMENTATION FOR APPROPRIATE ENCRYPTION  
19 AND DATA INTEGRITY TECHNIQUES, INCLUDING DISTRIBUTED LEDGER  
20 TECHNOLOGIES SUCH AS BLOCKCHAINS. AFTER ACCEPTING BUSINESS  
21 LICENSING RECORDS, THE DEPARTMENT OF STATE SHALL CONSIDER  
22 ENSURING THE INTEGRITY OF THOSE TRANSACTIONS BY SECURE METHODS,  
23 INCLUDING DISTRIBUTED LEDGER TECHNOLOGIES, TO PROTECT AGAINST  
24 FALSIFICATION, CREATE VISIBILITY TO IDENTIFY EXTERNAL HACKING  
25 THREATS, AND TO IMPROVE INTERNAL DATA SECURITY. WHEN  
26 DISTRIBUTING DEPARTMENT OF STATE DATA TO OTHER DEPARTMENTS AND  
27 AGENCIES, THE DEPARTMENT OF STATE SHALL CONSIDER USING

1 DISTRIBUTED LEDGER TECHNOLOGIES, INCLUDING BLOCKCHAINS, AS A  
2 MEANS OF PROTECTING DATA ACROSS JURISDICTIONS.

3 **SECTION 3.** In Colorado Revised Statutes, 24-33.5-1904,  
4 **amend** (2) introductory portion, (2)(f), and (2)(g); and **add** (2)(h) as  
5 follows:

6 **24-33.5-1904. Education - training - workforce development.**

7 (2) In furtherance of ~~the provisions of~~ subsection (1) of this section, the  
8 university of Colorado at Colorado Springs, in conjunction with other  
9 institutions of higher education and a nonprofit organization, may:

10 (f) Establish protocols for coordinating and sharing information  
11 with state and federal law enforcement and intelligence agencies  
12 responsible for investigating and collecting information related to  
13 cyber-based criminal and national security threats; **and**

14 (g) Support state and federal law enforcement agencies with their  
15 responsibilities to investigate and prosecute threats to and attacks against  
16 critical infrastructure; **AND**

17 (h) **INCLUDE DISTRIBUTED LEDGER TECHNOLOGIES WITHIN ITS**  
18 **CURRICULA AND RESEARCH AND DEVELOPMENT ACTIVITIES.**

19 **SECTION 4.** In Colorado Revised Statutes, 24-33.5-1905,  
20 **amend** (2) introductory portion, (2)(h), and (2)(i); and **add** (2)(j), (2)(k),  
21 and (2)(l) as follows:

22 **24-33.5-1905. Research and development.** (2) In furtherance of  
23 ~~the provisions of~~ subsection (1) of this section, the university of Colorado  
24 at Colorado Springs and any nonprofit organization with which the  
25 university has a partnership may consider the following:

26 (h) ~~Establish~~ **ESTABLISHING** protocols for coordinating and  
27 sharing information with state and federal law enforcement and

1 intelligence agencies responsible for investigating and collecting  
2 information related to cyber-based criminal and national security threats;  
3 ~~and~~

4 (i) ~~Support~~ SUPPORTING state and federal law enforcement  
5 agencies with their responsibilities to investigate and prosecute threats to  
6 and attacks against critical infrastructure;

7 (j) ENCOURAGING COORDINATION WITH THE UNITED STATES  
8 DEPARTMENT OF COMMERCE AND THE NATIONAL INSTITUTE OF  
9 STANDARDS AND TECHNOLOGIES TO DEVELOP THE CAPABILITY TO ACT AS  
10 A COLORADO IN-STATE CENTER OF EXCELLENCE ON CYBERSECURITY  
11 ADVICE AND NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGIES  
12 STANDARDS;

13 (k) STUDYING EFFORTS TO PROTECT PRIVACY OF PERSONAL  
14 IDENTIFYING INFORMATION MAINTAINED WITHIN DISTRIBUTED LEDGER  
15 PROGRAMS, ENSURING THAT PROGRAMS MAKE ALL ATTEMPTS TO FOLLOW  
16 BEST PRACTICES FOR PRIVACY, AND PROVIDING ADVICE TO ALL PROGRAM  
17 STAKEHOLDERS ON THE REQUIREMENT TO MAINTAIN PRIVACY IN  
18 ACCORDANCE WITH REQUIRED REGULATORY BODIES AND GOVERNING  
19 STANDARDS; AND

20 (l) ENCOURAGING THE USE OF DISTRIBUTED LEDGER  
21 TECHNOLOGIES, OR BLOCKCHAINS, WITHIN THEIR PROPOSED CURRICULA  
22 FOR PUBLIC SECTOR EDUCATION.

23 **SECTION 5.** In Colorado Revised Statutes, 24-34-101, **add** (14)  
24 as follows:

25 **24-34-101. Department created - executive director.** (14) IN  
26 CONJUNCTION WITH THE EFFORTS OF THE OFFICE OF INFORMATION  
27 TECHNOLOGY REGARDING CYBER CODING CRYPTOLOGY FOR STATE

1 RECORDS PURSUANT TO SECTION 24-37.5-407, THE EXECUTIVE DIRECTOR  
2 OF THE DEPARTMENT OF REGULATORY AGENCIES OR THE DIRECTOR'S  
3 DESIGNEE SHALL CONSIDER SECURE ENCRYPTION METHODS, ESPECIALLY  
4 DISTRIBUTED LEDGER TECHNOLOGIES, TO PROTECT AGAINST  
5 FALSIFICATION, CREATE VISIBILITY TO IDENTIFY EXTERNAL HACKING  
6 THREATS, AND TO IMPROVE INTERNAL DATA SECURITY, ESPECIALLY TO  
7 SECURE BUSINESS OWNERSHIP AND STOCK LEDGER OWNERSHIP DATA THAT  
8 MIGHT BE POTENTIAL HIGH-RISK TARGETS FOR CORPORATE CYBER THEFT  
9 AND TRANSACTION FALSIFICATION. THE CONSIDERATIONS FOR  
10 DISTRIBUTED LEDGER TECHNOLOGIES SHALL INCLUDE BEST PRACTICE  
11 ATTEMPTS TO MAINTAIN PRIVACY OF PERSONALLY IDENTIFYING  
12 INFORMATION OF THE DISTRIBUTED USER BASE WHILE UTILIZING THE  
13 VISIBILITY OF DISTRIBUTED TRANSACTIONS.

14 **SECTION 6.** In Colorado Revised Statutes, 24-37.5-105, **add**  
15 (12), (13), and (14) as follows:

16 **24-37.5-105. Office - responsibilities - rules.** (12) IN  
17 CONJUNCTION WITH THE EFFORTS OF THE OFFICE OF THE CHIEF  
18 INFORMATION SECURITY OFFICER REGARDING CYBER CODING CRYPTOLOGY  
19 FOR STATE RECORDS PURSUANT TO SECTION 24-37.5-407, THE OFFICE  
20 SHALL CONSIDER THE ANNUAL METRICES CREATED PURSUANT TO SECTION  
21 24-37.5-407 (3) TO RECOMMEND PROGRAMS, CONTRACTS, AND UPGRADES  
22 OF DATA SYSTEMS THAT HAVE GOOD COST-BENEFIT POTENTIAL OR RETURN  
23 ON INVESTMENT.

24 (13) BEGINNING ON THE EFFECTIVE DATE OF THIS SUBSECTION  
25 (13), IN THE ADMINISTRATION OF ANY NEW MAJOR INFORMATION  
26 TECHNOLOGY PROJECT, THE OFFICE, IN CONJUNCTION WITH THE STATE  
27 AGENCY WITH WHICH IT IS WORKING, SHALL EVALUATE THE POTENTIAL

1 USE OF BLOCKCHAIN AND DISTRIBUTED LEDGER TECHNOLOGIES AS PART  
2 OF THE PROJECT.

3 (14) THE OFFICE SHALL CONDUCT AN ASSESSMENT AND BRING  
4 RECOMMENDATIONS FOR A BLOCKCHAIN IMPLEMENTATION TO THE JOINT  
5 TECHNOLOGY COMMITTEE OF THE GENERAL ASSEMBLY. THE STUDY MUST  
6 PRODUCE RECOMMENDATIONS OF POTENTIAL USE CASES WHERE  
7 BLOCKCHAIN OR DISTRIBUTED LEDGER TECHNOLOGIES CAN BE  
8 IMPLEMENTED INSIDE OF STATE TECHNOLOGY SOLUTIONS.

9 **SECTION 7. Safety clause.** The general assembly hereby finds,  
10 determines, and declares that this act is necessary for the immediate  
11 preservation of the public peace, health, and safety.